Communicable Disease

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Local Communities Prepare for Infectious Disease Emergencies

It's a sunny, breezy fall day in Capital City. The big game and homecoming are among the highlights of the coming weekend. Unfortunately, the hospital emergency department and ambulatory care facilities are doing a brisk business. A surprising number of folks are experiencing fever and respiratory distress. Looks like the flu season may be arriving early this year. Or is it?

During October 2000, the Division of Epidemiology and Immunization, in conjunction with Management Sciences for Health, sponsored day-long planning workshops entitled "Infectious Disease Emergency Preparedness." The goal of the interactive program was to stimulate awareness and community planning with regard to infectious disease emergencies including bioterrorism. The audience included local boards of health, first responders, emergency management staff, and hospital infectiouncontrol and emergency department practitioners. Workshops were held in Hyannis, Fairhaven, Brookline, Northampton, Worcester and North Andover. Seventy-six (76) communities were represented.

Following overviews of infectious disease epidemiology, bioterrorism, and the role of the Massachusetts Department of Fire Services, HazMat (Hazardous Materials) Response Program, participants analyzed case studies—a pandemic influenza scenario, and an anthrax release at a large public event. As the cases unfolded, each group considered various professional responsibilities and possible response strategies. Participants were prompted with questions and problems to highlight the strengths and needs of communities.

Based on the feedback provided by participants, the questions posed to speakers, and the conversations which filled the conference rooms during the case studies, these workshops were very well received. Sixty percent (60%) of those completing evaluations (235/245) rated the overall experience as "excellent." Twenty-seven percent (27%) rated the overall experience as "satisfactory." Participants left the workshop with a better understanding of what an infectious disease emergency is, and how various professional groups can coordinate response.

For more information about Infectious Disease Emergency Preparedness, including Bioterrorism Response, please contact the Division of Epidemiology and Immunization at 617-983-6800 or visit the MDPH website at www.state.ma.us/cdc. Additional resources are listed below:

Massachusetts Emergency Management Agency (MEMA) 400 Worcester Road, Framingham MA 01702-5399; Phone: (508)820-2000; Fax: (508) 820-2030; www.magnet.state.ma.us/mema/

MA Dept of Fire Services/Hazmat PO Box 1025, State Road, Stow, MA 01775; Phone: (978) 567-3100; Fax: (978) 567-3150; http://www.state.ma.us/dfs/sfmo/sfmohome.htm

U.S. Centers for Disease Control and Prevention 1600 Clifton Rd. Atlanta, GA 30333; Phone: (800) 311-3435; http://www.cdc.gov/

Begin planning now for the 2001-2002 flu season!

The recommendation to offer flu vaccine to everyone 50 years of age and older will be implemented next fall and will likely result in increased demand. As in previous years, state-supplied vaccine will not be sufficient to meet the demand for flu vaccine. Health care providers should begin planning now. Submit orders for privately-purchased flu vaccine as soon as possible. For more information on purchasing vaccine, contact the MIP Vaccine Unit at (617) 983-6828.

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Epidemiology

Recommendations for Petting Zoos, Petting Farms, Animal Fairs, and Other Events where Contact between Animals and the Public is Permitted

Several recent outbreaks of enteric illness associated with farm animals in the United States have highlighted the importance of safety whenever contact between animals and the public is permitted. The Massachusetts Department of Public Health (MDPH) recently released "Recommendations for Petting Zoos, Petting Farms, Animal Fairs, and Other Events where Contact between Animals and the Public is Permitted." The purpose of these recommendations is to decrease human exposures to rabies and to other illnesses transmitted from animals to people.

Diseases that can be transmitted from animals to people are called zoonotic diseases. Zoonotic diseases include enteric, or diarrheal illnesses caused by organisms such as *E. coli* 0157:H7, salmonella and cryptosporidium. Rabies, cat-scratch disease and psittacosis are other examples of zoonotic diseases. Certain groups of people may be more susceptible to these illnesses. These groups include infants, children, pregnant women and those individuals with a weakened immune systems.

One of the most important measures to prevent the transmission of zoonotic diseases to people is providing adequate hand washing facilities anywhere contact between animals and the public is permitted. Additionally, eating and drinking by the public in animal areas should not be allowed, and visitors to animal events or farms should NEVER be allowed to sample animal feed or drink raw milk. Animals should be closely monitored for signs of illness, and human contact with animals should always be supervised.

To obtain a complete copy of these new recommendations, go to the MDPH web site at www.state.ma.us/dph/; or call the Division of Epidemiology and Immunization at (617) 983-6800 to have a copy mailed to you.

West Nile Virus Update 2001

In December of last year, the State Laboratory Institute hosted the first meeting of the 2001 Massachusetts West Nile Virus Planning Conference. The conference was attended by a wide range of federal, state and local health officials, scientific experts, veterinary experts, mosquito control officials, and environmental groups. Four working groups were established to address the following topics: Surveillance and Disease Risk Assessment; Pesticide Risk Assessment; Intervention Efficacy; and Communication. These working groups have been meeting on a regular basis and will submit recommendations to be combined into a 2001 Arborvirus Control Plan for Massachusetts. This plan is scheduled for public release in April 2001.

West Nile Virus encephalitis is a rare disease. The virus is transmitted to humans when a mosquito feeds on an infected bird and then bites a human. There are several steps you can take to minimize the risk to you and your family. These primarily include reducing exposure to mosquitoes by avoiding outdoor activities between dusk and dawn, wearing long-sleeves and long pants when you must be outdoors during these hours, and the safe use of insect repellents according to the manufacturer,s directions.

In addition, you can reduce the number of mosquitoes around your home and neighborhood by eliminating any standing water that may have collected in ceramic pots, empty trash cans, discarded tires, wading pools and wheelbarrows. Keeping swimming pools properly chlorinated and not allowing water to stagnate in bird baths by changing it frequently can also help.

More detailed information is available on West Nile virus and more complete prevention tips, on the MDPH web site at www.state.ma.us/dph/. Once it has been made public, the 2001 Arborvirus Control Plan for Massachusetts will also be available on the web site.

Guide to Surveillance and Reporting

The Massachusetts Department of Public Health (MDPH) is pleased to announce the new "Guide to Surveillance and Reporting". Its purpose is to guide local boards of health and health department staff through specific surveillance and reporting responsibilities. The manual contains disease information, reporting guidelines, control recommendations and legal requirements. Local boards of health play a key role in the state's surveillance system and MDPH is committed to providing more technical assistance.

The manual is designed for use by local boards of health and health department staff who are responsible for infectious disease case investigation and follow-up (including VNAs that contract with local boards of health). Other healthcare professionals may wish to use this information to facilitate their understanding of local health department surveillance and reporting responsibilities and of how they can collaborate and strengthen timely and complete infectious disease reporting.

Two copies have been sent to each local board of health in Massachusetts (March 2001). Copies have also been sent to VNAs and hospital infection control departments. Local boards of health may request an additional copy (if two copies are not sufficient) by contacting the Division of Epidemiology and Immunization at (617) 983-6800.



Update on Syphilis In Massachusetts, 2000

After a decade of steady decline in reported syphilis in Massachusetts (from 1,175 cases in 1990 to an historic 81-year-low of 97 cases in 1999), there was an increase in the number of reported cases to 139 in 2000. An issue of particular concern was that this was the second year in a row of cases occurring among men who have sex with men (MSM). In 1980, more than 50% of the reported primary and secondary syphilis in Massachusetts was among MSM. Prevention efforts directed at HIV/AIDS had a dramatic effect and by the mid-1990s less than 1% of reported early syphilis cases in Massachusetts were among MSM. The decline of syphilis was a measure of the impact of safer sex messages. However, in 1999, included among the low number of reported cases were six cases in MSM. Three were associated with a bath house in Boston. The others involved use of the Internet to find sex partners. In 2000 34 MSM were among 139 total reported individuals with syphilis. Case and partner interviews indicate a number of factors in acquisition of disease, so interventions need to be multi-factorial. However, this is still a relatively small number of cases and the community is mobilizing to increase awareness and promote the safer sex message.

One of the critical elements of the Syphilis Elimination Plan is the engagement of affected communities in shaping the plan. A series of community forums is planned for April (National STD Month) across the state. The Syphilis Elimination Plan forums will be held in:

4/10 - Lowell/Lawrence, Middlesex Community College

4/11 - Jamaica Plain, Boston, State Laboratory Institute

4/18 - Springfield, Greek Cultural Center

4/19 - Revere, Williams School

4/23 - Brockton, Brockton High School

4/26 - Worcester, YWCA

The programs begin at 6 PM. For more information, contact the Syphilis Elimination Coordinator, Vanessa Jerry, at 617-983-6957.

New Data Management System for the STD Division

The STD Prevention Division has adopted the data management system created by the federal Center for Disease Control and Prevention (CDC). The existing FoxPro-based data management system was the oldest at the State Laboratory Institute, having been developed in 1985. This software was beginning to show its age more than its capabilities. CDC's system, called STD*MIS, will allow greater flexibility and can be customized without needing programmer support. The Division will be able to expand the number and type of variables it collects, such as behavioral and community-level information about cases, partners, and social circles. The new data management system is a step toward more sophisticated epidemiologic analysis and improved understanding of trends and correlates of infection. It is hoped that this will lead to more informed and effective interventions.

Would You Like to Receive a subscription to CD Update?

Just send an email with your name and mailing address to:

jacqueline.dooley@state.ma.us

Chlamydia in Massachusetts, 2000

The STD Prevention Division and the STD Laboratory of the State Laboratory Institute have been working since 1996 to increase chlamydia screening among women who would not ordinarily have access to such services. It is part of a federally funded initiative called the Infertility Prevention Project, or IPP. The IPP has a third partner, the five Title X family planning agencies in Massachusetts. In addition to screening at STD clinics, we are now providing screening laboratory resources at 12 family planning clinics, two jails, one adolescent clinic, one homeless shelter, DYS facilities in two cities, and two HIV multi-service centers. In 1995, the STD Lab tested 3,197 specimens for chlamydia (screening and diagnostic). In 2000, the Lab tested 16,881specimens. Results, by type of site, were as follows:

Site	Total Tested	No. Males	No. Pos. (%)	No. Females	No. Pos. (%)
STD Clinics	4945	2181	285(13.1)	2749	203(7.4)
FP Clinics	6525	18	2(11.1)	6508	228(3.5)
Other Sites	4748	3197	173(4.4)	1561	80(5.1)
Total	16218	5396	460(8.5)	10818	511(4.7

The increase in reported cases of chlamydia is attributable in part to increased screening. In 2001, we will be approaching more jails and school-based clinics to offer these services. If, in the course of other screening activities, we notice that there are any sites with gonorrhea rates that rival the chlamydia rates, we have approval from CDC to use IPP funds for gonococcal screening.

Immunization

Update on Pertussis

Increasing incidence in adolescents and adults

In 2000, there were over 1280 confirmed cases of pertussis reported to the Massachusetts Department of Public Health (MDPH). This compares to approximately 650 cases in 1999. An increase is not unexpected as pertussis incidence typically cycles over 2-3 year periods. However, over the last decade there has been a marked trend in a shift of cases to older age groups. While the incidence in infants and children 1-10 years of age remained stable, in adolescents and adults it increased 5-10 fold. In 1998, adolescents and adults accounted for over 90% of pertussis cases in Massachusetts. In addition, the disease is often severe in these age groups with over 85% reporting paroxysmal cough, over 50% with cough for > 4 weeks, and over 40% experiencing vomiting after cough. (Yih, K et al: Journal of Indfectious Diseases 2000; 182: 1410-16)

Precautions when treating/prophylaxing newborns

An association between orally administered erythromycin and infantile hypertrophic pyloric stenosis (IHPS-blockage of the outlet of the stomach) has been reported in infants < 6 weeks of age. Since confirmation of erythromycin as a contributor to cases of IHPS will require additional investigation, and since alternative therapies are not as well studied, erythromycin is still recommended for the prophylaxis and treatment of disease caused by *Bordetella*. *pertussis*. The Massachusetts Immunization Program (MIP) recommends the following when administration of erythromycin to young infants is being considered:

- An infant's exposure to pertussis should be well established in order to minimize unnecessary prophylaxis.
- Physicians who prescribe erythromycin to newborns should inform parents about the potential risk and signs of IHPS, such as projectile vomiting or excessive irritability.
- Suspicion of IHPS following use of oral erythromycin should be reported to MedWatch at 800-FDA-1088 (tel.) or 800-FDA-0178 (fax) and to the MIP at (617) 983-6800.

New Guidance on the use of azithromycin and clarithromycin

For patients unable to tolerate erythromycin, the American Academy of Pediatrics' 2000 Redbook offers the following guidance on the use of azithromycin or clarithromycin for both the treatment and prophylaxis of pertussis

Clarithromycin (Biaxin®)

Children: 15-20 mg/kg/day PO divided into 2 doses/day for

7 days (maximum: 1 gm/day)

Adults: 500 mg PO 2 times/day for 7 days

Azithromycin (Zithromax®)

Children: 10-12 mg/kg/day PO given as 1 dose/day for

5 days (maximum: 600 mg)

Adults: 500 mg PO given as 1 dose/day for 5 days

Clarithromycin and azithromycin are NOT recommended for use in infants < 6 months of age or in pregnant women.

New control guidelines

The MIP has recently updated pertussis control guidelines to include the above information, as well as changes in recommendations regarding exclusion of asymptomatic contacts. If you would like a copy of these new guidelines or have guestions, please call the MIP at (888) 658-2850 or (617) 983-6800.

Results of Birth Hospital Record Review

Perinatal hepatitis B infection is a disease with serious sequelae. Infants who are born to hepatitis B surface antigen (HBsAg)-positive mothers have a 90% chance of becoming chronic hepatitis B virus (HBV) carriers and 25% of these carriers will die early in life of cirrhosis or liver cancer. Timely and appropriate immunoprophylaxis can reduce an infant's chance of becoming a chronic HBV carrier by 90%.

Congenital rubella syndrome (CRS) is also a risk for infants born to rubella-susceptible women. Contracting rubella during early pregnancy can result in fetal death, premature delivery, and an array of congenital defects.

In an effort to reduce morbidity and mortality among infants born to HBsAg-positive and rubellasusceptible mothers, the Advisory Committee on Immunization Practices (ACIP) and the American College of Obstetricians and Gynecologists (ACOG) recommend that mothers be screened for HBsAg and rubella immunity at an early prenatal visit. Maternal HBsAg and rubella results should be documented in the mother's and infant's hospital record (MA Regulation 105 CMR 130.627). The ACIP also recommends that all infants, regardless of the mother's HBsAg status, receive their first dose of hepatitis B vaccine at birth, and that all rubellasusceptible women be immunized with a rubellacontaining vaccine prior to discharge from a hospital after childbirth.

In 2000, the Massachusetts Immunization Program (MIP) conducted a statewide maternal and newborn birth hospital record review of infants born from January - June 1999. The MIP found that 100% of women were screened for HBsAg and 98% were screened for rubella immunity. Additionally, 91% of newborns had documentation of having received their first dose of hepatitis B vaccine at birth. Unfortunately, none of the 7 rubella-susceptible or rubella status-unknown women had documentation of having received a rubella-containing vaccine prior to hospital discharge.

The results of the birth hospital survey were encouraging, and birth hospitals and pediatric providers are encouraged to continue their collaboration with MIP to further reduce incidence of perinatal hepatitis B infection and CRS.

You be the epi

Epi Jumble

Yelm eiDasse Tickborne disease endemic in

Massachusetts

clEsvRulnaiE Monitor disease occurrence

Hgdaa**IN**swhn Most important step in infection

control

da**C**pnie**M** Global Epidemic

mccp**U**na**O**eolc Disease targeted by newly licensed

childhood vaccine

mtaaLuriE Zoonotic disease implicated in recent

Martha's Vineyard outbreak

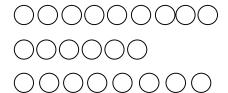
ypt**MC**aTmasoi Absence of clinical symptoms

silalRet Pathogen responsible for numerous

goOceSenYMotn ready-to-eat meat product recalls

Use the above capitalized letters to solve this clue:

A complication of *E. coli* O157:H7 is:



Save the dates

The Sixth Annual MIAP Skills Building Conference: May 17, 2001, 8:30 AM to 4:30 PM, Holiday Inn, Worcester. A one-day conference to provide up to date information on the fast changing field of immunization with a special emphasis on implications in Massachusetts. For more information call (617) 451-0049, ext. 806 or email: miapma@hotmail.com

2001 Satellite Broadcast Presentations: Sponsored by the National Immunization Program, Centers for Disease Control and Prevention.

Immunization Update-2001: September 20, SLI Auditorium, Jamaica Plain, MA, 9:00 AM to 11:30 AM and 12:00 PM to 2:30 PM.

Internation Travel (Vaccinations): December 6, SLI Auditorium, Jamaica Plain, MA, 12:00 PM to 3:30 PM.

For more information on the satellite courses, contact Walt LaSota at (617) 983-6834.

A thirty year-old white male was seen at an STD clinic early in the year. He came to the clinic upon being informed by a casual sex partner that he (the partner) had been diagnosed with gonorrhea (GC). The patient presented with a macular rash on his abdomen. A urethral swab was done to test for gonorrhea and for chlamydia, and he was treated presumptively for GC and chlamydia. A blood specimen was drawn for syphilis serology. The syphilis serology result was positive, with a titer of 1:128. The man was diagnosed with secondary syphilis.

The patient reported that he and his primary partner had sex with people they met through Internet chat rooms. He had anonymous sex with people from Philadelphia and San Francisco whom he had met through the Internet. However, he named five workable contacts, with addresses and phone numbers provided.

The first was a 30 year-old white male who was diagnosed with gonorrhea but did not have syphilis. He was treated for the GC and "epi-treated" for the syphilis. The second was a 33 year-old white male who had neither GC nor syphilis. He was also "epi-treated" for syphilis. The third was a 29 year-old Hispanic male, who was diagnosed with secondary syphilis and did not have GC. He was treated for syphilis. The fourth was a 36 year-old white male did not have GC or syphilis. He was "epi-treated" for syphilis. The fifth partner was a 40 year-old white male. He refused medical examination and treatment.

These six men were all professionals who traveled across the US and engaged in sexual relations with people they met through Internet chat rooms or at parties advertised on the Internet.

What do you do now?

This cluster is an illustration of scenarios that are becoming more common across the country. The Internet is being used to find sex partners or to find parties or events where one can engage in sex. The Internet is being used by people of all ages, race/ethnicity groups and sexual orientation as a way of making social and sexual connections. It is changing the traditional epidemiology of sexually transmitted diseases, in which partners were connected, more often than not, through social group and geography. The change in sexual partner mixing patterns makes it imperative to adjust surveillance and disease intervention. In addition to the usual questions involving who, what, when and where, we need to begin asking, "How did you meet your partner(s)?" We need to track what is on the World Wide Web. Which web sites are being used? Where and when will parties or other gatherings take place? How can protection messages be prominently displayed on the web and at such events? What information about STDs and STD prevention is on the web? Who is transmitting such information? Is it factual? STD prevention programs need to get on the "information super-highway" to be able to fashion appropriate prevention interventions for this medium.

Refugee and Immigrant Health

Improved Access to Health Care for Asylees

The Immigration and Naturalization Service defines an asylee as an individual "in the United States who is unable or unwilling to return to his or her country of nationality because of persecution or a well-founded fear of persecution." The basis for granting asylum in the United States is consistent with the 1967 United Nations Protocol on Refugees.

In recent years, approximately 20,000 asylum seekers received asylum in the United States annually. The leading countries of nationality for cases approved in FY2000 were China, Somalia, Ethiopia, Colombia and India.

Federal regulations limit time eligibility for refugee cash and medical assistance to eight months. Recent policy changes by the Office of Refugee Resettlement permit asylees to be eligible for refugee benefits and services, including health assessment, beginning on the date asylum is granted rather than the date of entry into the United States. Historically, while recipients of political asylum were technically eligible for these benefits, the process for receiving asylum was long and protracted and the vast majority of asylees were beyond the period of eligibility when asylum was granted.

As a result of the policy change, physicians performing refugee health assessments, as part of the Massachusetts Refugee Health Assessment Program (RHAP), may begin to see asylees referred for evaluation. In many ways, the health status of asylees will resemble that of refugees. Asylees, like refugees, come to the United States often after having experienced significant psychological and physical trauma, particularly individual torture and rape victimization. At the time of the health assessment, shortly after arrival, most refugees are not experiencing symptoms of acute psychological distress. In contrast, psychological issues among asylees may be central in the struggles of their daily lives and compounded by the societal marginalization of asylum applicants. During the process of applying for asylum, applicants are in a tenuous position, having no access to publicly funded benefits and a low likelihood of working in any meaningful job with benefits like health insurance.

While most asylees will not have undergone an overseas health evaluation, many will have had some kind of medical or psychological evaluation in support of their legal case. As in reviewing the OF-157 overseas health screening form, RHAP clinicians should ask the asylee if they have any documentation of the findings from these assessments, often done pro bono in private settings. In most cases, such evaluations are not going to include screening tests as are conducted during immigration examinations. Therefore, clinicians should remember that asylees will not have had a chest X-ray, VDRL test, or HIV test done overseas. RHAP protocols mandate a PPD test for evaluating tuberculosis infection while RPR and HIV tests are available as supplemental tests complementing the core testing package of a urinalysis, complete blood counts, stool microscopy for ova and parasites, varicella and hepatitis B serologies, and lead testing (for young children).

Like refugees, it is expected that asylees will have high prevalences of latent tuberculosis infection, dental caries, eosinophilia, anemia, chronic diseases such as diabetes and hypertension, and underimmunization. Many will also come from countries with endemic hepatitis B, parasitoses, and HIV infec*continued on page 8*

Resource Corner

The Provider's Guide to Quality and Culture http://erc.msh.org/quality&culture

The Provider's Guide to Quality and Culture is a new web resource designed to improve awareness and understanding of cultural competence among primary health care providers. Developed by Management Sciences for Health in partnership with the U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Primary Health Care, The Provider's Guide has as its focus an interactive quiz that allows health providers to determine their own level of cultural competence. A variety of learning resources are available, including information on specific cultural groups, tools for improving cross-cultural communication, bibliographies, and links to online databases and other relevant materials.

We wish to inform you that tomorrow we will be killed with our families

Philip Gourevitch. Farrar, Straus and Giroux; New York. 1998.

Philip Gourevitch has written a book that summons up memories of the 1994 Rwandan genocide and refugee crisis and details tragedies and moral dilemmas of such magnitude that we are left wondering how we never knew or remembered what happened in this humanitarian catastrophe.

Through a collection of personal interviews, Gourevitch brings the reader to see events through multiple perspectives and to begin to understand the post-colonial and political context. Rwanda, in the aftermath, faced the return of many Hutus, all of whom had earlier been instructed by their Hutu Power leaders to kill all Tutsis; Tutsi community members who survived the genocide now struggle with enormous loss and coexistence with returning Hutus. Gourevitch analyzes the challenges of reconciliation, retribution and regional instability.

The U.S. is resettling an increasing number of refugees from Africa. Among the arrivals from Rwanda and surrounding countries are individuals who have been affected by this genocide and its aftermath. Though we may not know their personal histories, this book helps anyone working with newcomers from this region to capture a glimpse of what they, their communities and nations may have endured.

Detecting Laboratory Cross-Contaminated Tuberculosis Cultures: Results of an 18 month study

Cross-contamination of *M. tuberculosis* (MTB) specimens is reported to be responsible for misdiagnosis of tuberculosis disease (TB) in 1.8-3.5% of TB patients. Such misdiagnoses can result in unnecessary treatment and burden the health care system. Individual laboratories and programs have criteria for suspecting that laboratory contamination or other error has occurred. In 1998, the MDPH Division of TB Prevention & Control collaborated with the CDC on a study investigating MTB specimens to determine the rate and cost of misdiagnosis of TB in Massachusetts due to laboratory cross-contamination, and to evaluate standardized criteria for triggering suspicion that cross-contamination has occurred. Twenty-three laboratories processing MTB specimens from Massachusetts' residents were asked to participate.

METHODS:

From January 1, 1998 through June 30, 1999, 342 potential TB cases were enrolled in the study. The 5 criteria used to screen for cross-contamination included: 1) patients with a single MTB culture-positive specimen, excluding those with tissue pathology examination consistent with TB disease; 2) patients with an MTB culture-positive specimen collected >30 days after a negative culture; 3) patients with an MTB culture-positive specimen collected >90 days after the start of TB therapy, the isolate being a different strain from any others from the same patient; 4) patients for whom a healthcare provider suspected that an MTB culture-positive result was erroneous; and 5) patients for whom the laboratory processing the specimen suspected that an MTB culture-positive result was erroneous. Potential sources of contamination included MTB culture-positive specimens processed within two working days of the questionable specimen and positive control isolates used within the same biochemical safety cabinet.

Isolates were typed by RFLP analysis at the Wadsworth Center, New York State Department of Health. Intensive epidemiologic investigation of patients and sources was conducted. Three TB experts reviewed the data and voted whether the MTB cultures were likely true- or false-positives. In addition to identifying cross-contamination, the criteria identified other laboratory errors leading to false-positives, such as mislabeling of specimens and misinoculation. Cost analysis was performed for patients treated erroneously for TB.

RESULTS:

Of 342 patients screened, 5 (1.46%) had cross-contaminated cultures and 3 (.8%) had a misdiagnosis of TB. The total direct cost for treating these patients was estimated at \$27,600, of which \$26,810 was for public health clinical services and medications.

The sensitivity and specificity of the criteria in detecting false-positive cultures from cross-contamination and other laboratory error was 100% and 0%, respectively, for criterion 1, 62.5% and 97.2% for criterion 4, and 50% and 100% for criterion 5. No patients met criteria 2 or 3; thus we could not evaluate these criteria.

DISCUSSION:

In our experience, healthcare providers and TB laboratories were the best sources for identifying possible errors. TB Division efforts to increase communication with these groups will help in identifying erroneous culture results. Although highly sensitive, lack of specificity made criterion 1 inefficient for population-based screening. However, it may be the most sensitive tool for investigating laboratory error in instances where there is a high suspicion of error in an individual laboratory over time. The TB Division would like to thank the healthcare providers and laboratory personnel who participated in the study. We look forward to our continuing collaboration.

Western and Central Regional Clinical Services Highlight TB Surveillance Area (TSA) 1

TSA Nurse: Carol Cahill, R.N. TSA Secretary: Evelyn Thomas

Tel: (413) 586-7525

Tuberculosis Surveillance Area 1 is largely rural, comprised of communities in Western and Central Massachusetts. The TB Division funds 7 TB Clinics in this region. This issue will highlight the Baystate TB Clinic.

Recently, the Baystate TB clinic moved to a new location at the Neighborhood Health Center, 11 Wilbraham Road in Springfield. This clinic has a team of pulmonologists headed by Dr. John N. Landis. The nurse manager is Areatha Lawson. Joanna Otero provides secretarial services. A team of health department nurses work with Areatha to coordinate tuberculosis services for their individual cities/towns. The clinic provides TB-related clinical services to residents living in twenty communities surrounding Springfield.

The clinic staff is available on Monday, Tuesday and Wednesday. Pulmonologists are at the clinic every Tuesday morning. Dr. Landis chairs a monthly chemotherapy conference with the staff to discuss the TB cases and their management. Once a month they hold a pediatric clinic, staffed by pediatric infectious disease specialists. Call (413) 794-5435 for an appointment.

CD UPDATE

Room 557 State Laboratory Institute 305 South Street Boston, MA 02130 Bulk Rate US Postage PAID Boston, MA Permit No. #55970

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TB Program Announcements

Announcements

- New calipers to measure Tuberculin Skin Test (TST) results are now available.
- The following patient and community education resources are now available.
 - A poster entitled, "Be a Hero" developed to educate children and motivate them to adhere to tuberculosis treatment regimens.
 - "Hero" buttons and stickers for children who complete TB treatment regimens.

Save the date

- The next Regional TB Update for the Southeast Region will be held at the Massasoit Community College Conference Center, Room A, 770 Crescent Street in Brockton on May 17, 2001.
- The next Regional TB Update for the Northeast Region will be held at Lawrence General Hospital, Lawrence, on September 20, 2001.

Answers to the Epi Jumble on page 5

Lyme Disease, Surveillance, Handwashing, Pandemic, Pneumococcal, Tularemia, Asymptomatic, Listeria Monocytogenes, Hemolytic Uremic Syndrome

Health Care for Asylees, continued from page 6

tion. While some parasitoses are typically self-limited, others such as schistosomiasis and strongyloidiasis may present particular long-term health risks to the patient. Also, parasitic infections may persist within refugee communities if not properly identified and treated.

Linkage with primary care will be important for asylees, particularly given their societal marginalization and the fact that most will not have had a regular source of medical care. The primary care physician will be able to follow up on neglected health needs as well as those newly identified during the refugee health assessment.

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To subscribe, please call Jacki Dooley at (617) 983-6559

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